

REMARKS

I. Claim Objections

The objection to the second claim 33 has been obviated by appropriate amendment. In the new listing of claims, this claim is now listed as claim 39. The Applicant respectfully requests withdrawal of this objection.

II. 35 U.S.C. § 102: Claims 38-44

Claims 38-44 are directed to a highway advisory radio system. The system includes an amplitude modulating transmitter that is synchronized to a pseudorandom code received from a source remote from the controller.

U.S. Patent No. 5,133,081 to Mayo ("*Mayo*") describes a remotely controllable message broadcasting system. The system uses a synchronization signal to synchronize remote message transmitters. However, *Mayo* fails to teach or suggest synchronizing an amplitude modulating transmitter to a pseudorandom code received from a source remote from the controller.

Accordingly, the Applicant respectfully requests withdrawal of this rejection.

III. 35 U.S.C. § 103

A. Claims 1-3, 6, and 8-9

Claims 1-3, 6, and 8-9 are directed to operating radio stations in a broadcast network. The radio stations receive control data from a control unit, are compatible with more than one control signal format, and are configured to process this received control data based on the format of the data without operator intervention.

The combination of U.S. Patent Application No. 2003/0069002 to Hunter et al. ("*Hunter*"), U.S. Patent No. 6,215,997 to Han ("*Han*"), and U.S. Patent No. 5,046,124 to Wu et al. ("*Wu*") disclose delivering emergency notification content. The proposed combination describes communicating emergency notification

content in realtime to multiple transmitting parties (e.g., ISP, Cable TV provider, Direct Broadcast Satellite System provider) that continuously or periodically re-transmit the information. *See Hunter* para. 0050. Furthermore, the combination describes a technique that reports faults. However, the combination does not teach or suggest a radio station being compatible with more than one control signal format and being configured to process control data based on a type of received control data without operator intervention. To the contrary, each transmitting party represents a different type of service provider (e.g., a Cable TV operator 15, Direct Broadcast Satellite System 17, or Internet Service provider 18). *See Hunter* para. 0050. The proposed combination does not disclose how the received data is processed, and therefore the references fail to teach or suggest that a transmitting party recognizes control data selected from multiple formats and processes the control data based on the recognized format without operator intervention.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

B. Claims 16-19

Claims 16-19 are directed to a system of broadcasting a radio signal. The system includes a plurality of dispersed highway advisory radio stations that are configured to automatically detect a DTMF control command and a digital series control command and process data according to one of the detected control command formats.

The proposed combination of *Hunter*, *Han*, and *Wu* does not disclose a plurality of dispersed highway advisory radio stations. Instead, the combined references disclose Cable TV, Satellite, and Internet service providers, and cellular base stations. Furthermore, the combined references fail to teach or suggest a plurality of highway advisory radio stations that are configured to automatically detect a DTMF control command and a digital series control

command and process data according to one of the detected control command formats.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

C. Claims 4-5

Claims 4-5 are directed to operating radio stations in a broadcast network. The radio stations receive control data from a control unit and are configured to process this data without operator intervention. The control data is selected from DTMF tones or digital serial data.

The combination of U.S. Patent Application No. 2005/0143062 to Dowling ("*Dowling*") with *Hunter*, *Han*, and *Wu* references disclose delivering emergency notification content. The proposed combination describes communicating emergency notification content in realtime to multiple transmitting parties (*e.g.*, ISP, Cable TV provider, Direct Broadcast Satellite System provider) that continuously or periodically re-transmit the information. *See Hunter* para. 0050. Furthermore, the combination describes a technique that reports faults. However, the combination does not teach or suggest a radio station being configured to process control data based on a type of received control data. To the contrary, each transmitting party represents a different type of service provider (*e.g.*, a Cable TV operator 15, Direct Broadcast Satellite System 17, or Internet Service provider 18). *See Hunter* para. 0050. The proposed combination does not disclose how the received data is processed, and therefore the references fail to teach or suggest that a transmitting party recognizes control data selected from multiple formats and processes the control data based on the recognized format without operator intervention.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

D. Claim 7

Claim 7 is directed to operating a radio station in a broadcast network. Claim 7 depends from claim 6.

The proposed combination of *Hunter, Han, Wu*, U.S. Patent No. 6,058,161 to Anderson et al. ("*Anderson*") and U.S. Patent No. 6,665,268 to Sato et al. ("*Sato*") discloses delivering emergency notification content. The proposed combination does not disclose how the received data is processed, and therefore the references fail to teach or suggest that a transmitting party recognizes control data selected from multiple formats and processes the control data based on the recognized format without operator intervention.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

E. Claim 10

Claim 10 is directed to operating a radio station in a broadcast network. Claim 10 depends from claims 9 and 6.

The proposed combination of *Hunter, Han, Wu*, and U.S. Patent Application No. 2004/0202166 to Dillon ("*Dillon*") discloses delivering emergency notification content. The proposed combination does not disclose how the received data is processed, and therefore the references fail to teach or suggest that a transmitting party recognizes control data selected from multiple formats and processes the control data based on the recognized format without operator intervention.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

F. Claim 20

Claim 20 is directed to a system of broadcasting a radio signal. The system includes a plurality of dispersed highway advisory radio stations that are configured to automatically detect a DTMF control command and a digital series

control command and process data according to one of the detected control command formats.

The proposed combination of *Hunter*, *Han*, *Wu*, and *Dillon* do not disclose a plurality of dispersed highway advisory radio stations. Instead, the combined references disclose Cable TV, Satellite, and Internet service providers, and cellular base stations. Furthermore, the combined references fail to teach or suggest a plurality of highway advisory radio stations that are configured to automatically detect a DTMF control command and a digital series control command and process data according to one of the detected control command formats.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

G. Claims 11-15

Claims 11-15 are directed to a method of operating a radio station in a broadcast network. The method includes transmitting an amplitude modulated radio frequency signal through each of the plurality of radio stations at a synchronous rate.

The proposed combination of *Hunter* and *Wu* describe delivering emergency notification content. The proposed combination teaches frequency modulation, but does not teach or suggest amplitude modulation. Unlike amplitude modulation, which encodes information using a carrier wave of constant frequency and a varying amplitude, frequency modulation encodes information using a carrier wave having a varying frequency and a constant amplitude. Amplitude and frequency modulation schemes require different implementations, and therefore, a disclosure of frequency modulation fails to teach or suggest amplitude modulation.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

H. Claims 21 and 23

Claims 21 and 23 are directed to a system of broadcasting a radio signal. In this system, each of a plurality of radio stations may receive a command from a central computer and use data included with this command to adjust a phase angle of a modulated radio frequency.

The proposed combination of *Hunter*, *Wu*, and *Dillon* disclose delivering emergency notification content. The combination does not disclose a plurality of radio stations configured to receive a command signal that includes data to adjust a phase angle of a modulated radio frequency.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

I. Claims 22 and 24-25

Claims 22 and 24-25 are directed to a system of broadcasting a radio signal. In this system, each of a plurality of radio stations may receive a command from a central computer and use data included with this command to adjust a phase angle of a modulated radio frequency.

The proposed combination of *Hunter*, *Dillon*, *Wu*, and *Han* disclose delivering emergency notification content. The combination does not disclose a plurality of radio stations configured to receive a command signal that includes data to adjust a phase angle of a modulated radio frequency.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

J. Claims 26-37

Claims 26-37 are directed to a highway advisory radio system. The highway advisory radio system includes an interface coupled to a publicly switched network, and an Ethernet interface through which data is transmitted using a transmission control protocol and an internet protocol.

The proposed combination of *Mayo* and U.S. Patent Application No. 2004/0088345 to Zellner et al. ("*Zellner*") discloses a remotely controllable message broadcast system. The combination includes a single interface that is coupled to a phone line and which may receive multiple types of signals. These signals may include dial tones received over the telephone line, digits dialed by a DTMF dialer, and TCP/IP signals. See *Zellner*, para. 44.

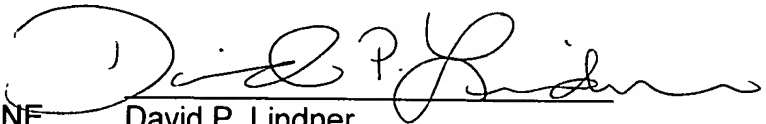
The combination fails to teach or suggest an interface coupled to a publicly switched network, and an Ethernet interface through which data is transmitted using a transmission control protocol and an internet protocol.

Accordingly, the Applicant respectfully requests withdrawal of these rejections.

CONCLUSION

With the above amendments and remarks, the Applicant submits that the claims are in condition for allowance. A Notice of Allowance is respectfully requested.

Respectfully submitted,



BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200

David P. Lindner
Registration No. 53,222
Attorney for Applicant